On page 7, line 16, please delete "the dark cross-hatching is" and insert therefor --the dotted bars to the right of peptide 12-31 are--.

On page 7, line 18, please delete "open bars" and insert therefor --vertical striped bars--.

On page 7, line 19, please delete "dotted bars" and insert therefor --open bars--.

IN THE CLAIMS:

Please delete claims 24 and 26.

Please amend claim 25 as follows.

25. (Amended) An isolated DNA molecule comprising a stretch of at least about 45 contiguous nucleotides selected from or complementary to the DNA sequence of Fig. 4 (SEQ ID NO. 3).

REMARKS

Claims 20-33 are pending in this application. Claims 24 and 26 are canceled herein. Accordingly, claims 20-23, 25 and 27-33 remain in the case. Applicants respectfully request reconsideration of the outstanding rejections for the reasons that follow.

Amendment of the Specification

In order to facilitate the filing of formal drawings at a later date, the specification is amended to make all references to the figure labels and legends of Figures 7A-7D, Figures 8A-8B, and Figure 9A consistent with the figure labels and legends of the subject figures as they will appear in the formal drawings. No new matter is believed to be added hereby.

Rejection under 35 U.S.C. §101

Claims 25 and 26 are rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. Since claim 26 is canceled herein, the rejection is moot with respect to this claim. Claim 25 is amended to recite "[a]n isolated DNA molecule", as supported generally throughout the application. Since the isolated DNA molecule claimed in amended claim 25 does not exist in nature, Applicants submit that the amendment overcomes the rejection and respectfully request that it be withdrawn.

Double Patenting Rejection of Claims 20-31

Claims 1-31 are rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 1-6 of U.S. Pat. No. 5,892,017. Since claims 1-19 are not pending, Applicants assume that the Office intended to apply the rejection to claims 20-31.

Claims 24 and 26 are canceled in the present application to avoid any same-invention type double patenting issue that may arise from claims 1 and 3 of U.S. Pat. No. 5,892,017, respectively. None of the remaining claims in the present application is the same as any claim in U.S. Pat. No. 5,892,017.

To obviate the obviousness-type double patenting rejection of claims 20-31 over the claims of U.S. Pat. No. 5,892,017, Applicants submit herewith a Terminal Disclaimer that terminally disclaims the period of any patent granted on the present application that extends beyond the term of U.S. Pat. No. 5,892,017.

In addition, the claims of the present application are related to the claims of U.S. Pat. Nos. 5,919,896, 5,922,541 and 5,840,856. The present application and U.S. Pat. Nos. 5,919,896, 5,922,541 and 5,840,856 are all assigned to Genentech, Inc. In order to avoid any obviousness-type double patenting issues with respect to the claims of the present application and the claims of U.S. Pat. Nos. 5,919,896, 5,922,541 and 5,840,856, the Terminal Disclaimer submitted herewith terminally disclaims the period of any patent granted on the present application that extends beyond the term of any of U.S. Pat. Nos. 5,919,896, 5,922,541 or 5,840,856.

In view of the Terminal Disclaimer submitted herewith, Applicants respectfully submit that the rejection is overcome and should be withdrawn.

Double Patenting Rejection of Claims 32 and 33

Claims 32 and 33 are rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claim 1 of U.S. Pat. No. 5,571,702. The Office apparently takes the position that present claims 32 and 33 are not patentably distinct from claim 1 of U.S. Pat. No. 5,571,702 because the pending claims are generic to the patented claim, i.e., the pending claims encompass the patented claim in its entirety.

Applicants respectfully traverse the rejection. Claim 1 of U.S. Pat. No. 5,571,702 recites "[a] method of amplifying a single stranded nucleic acid in a test sample, comprising the steps of (a) selecting an oligonucleotide primer having a 3' terminus consisting of at least

20 contiguous nucleotides selected from SEQ ID NO:1 or at least 20 contiguous nucleotides exactly complementary to SEQ ID NO:1". The nucleic acid sequence designated as SEQ ID NO:1 in U.S. Pat. No. 5,571,702 is the same as the nucleic acid sequence designated as SEQ ID NO:1 in the present application. In particular, the nucleic acid sequence of SEQ ID NO:1 (in both the present application and in U.S. Pat. No. 5,571,702) encodes the IL-8 type A receptor polypeptide sequence that is shown in Fig. 2 of U.S. Pat. No. 5,571,702 and in Fig. 2 of the present application.

In contrast, claims 32 and 33 of the present application recite "[a] method for determining the presence or absence of a platelet factor 4 superfamily receptor (PF4AR) nucleic acid in a sample, comprising the steps of: (a) selecting a probe comprising at least 20 contiguous nucleotides selected from the nucleic acid sequence of Fig. 4 (SEQ ID NO. 3) or at least 20 contiguous nucleotides complementary to the nucleic acid sequence of Fig. 4 (SEQ ID NO. 3)" and "[a] method of amplifying a platelet factor 4 superfamily receptor (PF4AR) single stranded nucleic acid in a sample, comprising the steps of: (a) selecting an oligonucleotide primer having a 3' terminus consisting of at least 20 contiguous nucleotides selected from the nucleic acid sequence of Fig. 4 (SEQ ID NO. 3) or at least 20 contiguous nucleotides complementary to the nucleic acid sequence of Fig. 4 (SEQ ID NO. 3)". The nucleic acid sequence of SEQ ID NO:3 is not the same as the nucleic acid sequence of SEQ ID NO:1. Although SEQ ID NO:3 and SEQ ID NO:1 exhibit some homology (the PF4AR receptor polypeptide sequence encoded by SEQ ID NO:3 is 34% identical to the IL-8 type A receptor (the high affinity IL-8 receptor) polypeptide sequence encoded by SEQ ID NO:1, as described on page 63, lines 14-19 of the specification), claims 32 and 33 of the present application are not generic to claim 1 of U.S. Pat. No. 5,571,702. Accordingly, claims 32 and 33 of the present application are patentably distinct from claim 1 of U.S. Pat. No. 5,571,702.

Claim 1 of U.S. Pat. No. 5,922,541 recites "[a] method for determining the presence or absence of the nucleic acid of SEQ ID NO:3 or its complement in a sample, comprising the steps of: (a) selecting a probe comprising at least 20 contiguous nucleotides selected from the nucleic acid sequence of SEQ ID NO:3 or its complement". Since SEQ ID NO:3 in U.S. Pat. No. 5,922,541 is the same as SEQ ID NO:3 in the present application, claims 32 and 33 of the present application are generic to claim 1 of U.S. Pat. No. 922,541. Accordingly, Applicants believe that the Office may have intended to base the present rejection on claim 1 of U.S. Pat. No. 922,541. In order to avoid any obviousness-type double patenting issues with respect to present claims 32 and 33 and claim 1 of U.S. Pat. Nos. 5,922,541, the

Terminal Disclaimer submitted herewith terminally disclaims the period of any patent granted on the present application that extends beyond the term of U.S. Pat. Nos. 5,922,541, as noted above.

In view of the foregoing arguments and the Terminal Disclaimer submitted herewith, Applicants respectfully request reconsideration and withdrawal of the obviousness-type double patenting rejection of claims 32 and 33 over claim 1 of 5,571,702.

In light of the above, Applicants believe this application is in condition for allowance and earnestly solicit a Notice to that effect. If the Examiner has any questions concerning this response, he should not hesitate to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,
GENENTECH, INC.

Date: January 24, 2000

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